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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,738	03/16/2004	Kimikazu Matsumoto	089367-0125	1166
22428	7590	11/19/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			KIM, RICHARD H	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/800,738

**Applicant(s)**

MATSUMOTO, KIMIKAZU

**Examiner**

Richard H Kim

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/16/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art (AAPA) in view of Choi et al. (US 6,429,918 B1).

Referring to claims 1 and 5, AAPA discloses a device and method comprising a pair of substrate (Fig. 17, ref. 200, 100); a liquid crystal sealed between the pair of substrates (300); a plurality of data lines and a plurality of scanning lines which are arranged so as to intersect each other on one surface of a first of the pair of substrates (Fig. 16, ref. 102, 106), a switching element having an electric current path, one end of which is connected to a corresponding one of the data lines, and having a control terminal which is connected to a corresponding one of the scanning lines (Fig. 16, res. 105), and having a control terminal which is connected to a corresponding one of the scanning lines (specs, page 3, lines 11-18); a pixel electrode which is provided above the data lines via an insulation film (112), and is connected to the other end of the electric current path of the switching element (Fig. 16, ref. 112); a common electrode which opposes that data line via the insulation film (111); a black matrix which is arranged on a second of the pair of substrates in a predetermined manner (202), the black matrix being covered by a flattening film (204). However, the reference does not disclose that the common electrode has slits in portion overlapping the data line to generate an electric field between the pixel electrode;

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and a first conductive film provided on the flattening film so as to oppose the data lines via the slits, the first conductive film being set to a common electric potential with the common electrode, wherein the first conductive film overlaps the portions of the common electrode wherein the slits are formed, and the first conductive film overlaps the black matrix, wherein the first conductive film has a pattern which is almost the same as that of the black matrix, wherein the first conductive film has a width narrower than a width of the black matrix.

Choi et al. discloses a device wherein the common electrode has slits in portions overlapping the data line to generate an electric field between the pixel electrode (col. 5, lines 14-16); and a first conductive film provided on a flattening film so as to oppose the data line (37), the first conductive film being set to a common electric potential with the common electrode (col. 5, lines 1-4), wherein the first conductive film overlaps the portions of the common electrode wherein the slits are formed (16a, 37), and the first conductive film overlaps the black matrix (33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a common electrode having slits in portions overlapping the data line to generate an electric field between the pixel electrode; and a first conductive film provided on the flattening film so as to oppose the data lines via the slits, the first conductive film set to a common electric potential with the common electrode, wherein the first conductive film overlaps the portions of the common electrode wherein the slits are formed, and the first conductive film overlaps the black matrix since one would be motivated to prevent light leakage (col. 2, lines 13-18). Furthermore, although the reference does not show that that the first conductive film

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opposes the data lines via the slit portions, having the data lines on a lower plane than the common signal lines are well known in the art.

Referring to claims 2-4 and 7-8, AAPA and Choi et al. disclose the device and method previously recited. Choi et al. further discloses that the first conductive film has a pattern that is almost the same as that of the black matrix (37, 33), wherein the first conductive film is made of a transparent metal layer or an opaque metal layer (col. 4, lines 65-66). However, the reference does not disclose that the first conductive film is made of ITO or is made of a material having a low resistance.

It would have been obvious to one having ordinary skill in the art at the time the invention was made for the conductive film to be made of ITO since ITO is well known in the art to be used as a conductive film for its transparent and high conductive properties. Further, it would have been obvious to one having ordinary skill in the art at the time the invention was made for the material to have low resistance since a device utilized as a conductive medium, as the conductive film is, is well known in the art to having a low resistance so as to be highly conductive.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard H Kim whose telephone number is (571)272-2294. The examiner can normally be reached on 9:00-6:30 M-F.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard H Kim  
Examiner  
Art Unit 2871

RHK

  
TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER